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Original Lectures.

PRIMARY PERINÆORRHAPHY.

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We are all subject to the law of mutation: There is change of structure, change of form, change of custom, change of habit, change of opinion and change of practice. Those, which a few years ago, we regarded as the best methods in medicine and surgery, have fallen into disuse, their places being supplied by others which we trust will prove to be better. Thus the changes go on from one year to another, and one generation to another, ever moving toward perfection in practice, but never reaching it. A few years ago I wrote an article on the subject announced, and published it in the *New England Medical Gazette*, wherein I advocated a method of procedure which differs in some important particulars from that which I am now about to commend. In my work on "Obstetrics," long since out of print, I taught similar ideas to those expressed in the article to which allusion has been made. But time and experience has wrought changes, and I therefore desire it to be understood that the instruction which I shall give you to-day represents my latest opinions and practice.

I design at this time to limit my remarks to a discussion of the best method of managing rupture of the perineum immediately after its occurrence, omitting an extended consideration of the frequency of the accident, and not touching at all on the methods of prevention.

The operation has been termed primary perinæorrhaphy to distinguish it from that which is made at a later period, that is to say, after the lapse of weeks, months or years. It is also known as the immediate operation.

We are often confronted, and doubtless you will be, by the assurance from Mr. Worldly-wise-man, that rupture of the perineum ought never to occur, and that it does not in his practice. Well now, if such a desirable state of obstetrical perfection is attainable, I suppose to-day I shall be pulling at the wrong end of the rope; for instead of teaching you how to repair lacerated perineæ, I ought to be drilling you in the tactics of prevention. But, ladies and gentlemen, after having seen many of the patients of these empty boasters, I pray you be not deceived. Lacerations do occur in the practice of the best obstetricians, to say nothing of these pretenders.

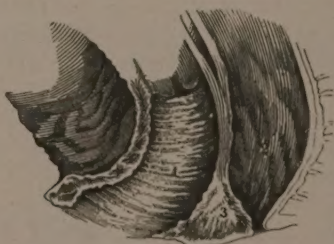


FIG 1.

A loop-hole is left for these would-be perfectionists in connection with the anatomical designations of the various parts which go to make up the vulvar structures. "What do we mean," I inquire, "by the perineum?" "It extends," says Agnew, in his excellent work on the "Female Perineum," "in a restricted sense, from the commissural connection of the labia majora, to the anus. The two

canals, vagina and rectum, as they approach their terminations—vulva and anus—recede from each other, leaving a triangular space into which the deep portions of the perineum extend.”

I show you in this chart what is meant. As here represented, it is, as you see, a body of triangular shape,—though some have attempted to show that it is rather rectangular in form,—and fills in the space between the lower parts of the rectum and vagina. At the most prominent elevation on the vaginal surface as shown in the chart, at about the junction of the middle and lower thirds is situated the fourchette, and between it and the posterior commissure of the vulva, lies the fossa navicularis. By reckoning the fossa navicularis as a distinct and separate surface of the perineum we have been given by some a quadrangular, instead of a triangular body. I wish to impress on your minds the image of the perineum as here depicted, for without it you will be unable to understand what farther I have to add on the subject.

The loop-hole through which I say these perfectionists sometimes crawl out, is found in connection with the use of the term “fourchette” in its application to the soft structures under consideration. I have pointed out to you the location of this feature, and there ought to be no confusion of ideas in connection with it; but from what I have read, and seen, and heard, I gather that there is. Recollect that it lies just within the posterior commissure of the labia majora, and is not a part of the commissure itself, though it does constitute a part of the perineum. This fourchette is nearly always ruptured in first labors, constituting an accident which all are quite willing to admit. More than that, the laceration is liable to involve the thin part of the posterior commissure. Now these obstetricians who claim never to have a lacerated perineum, do confessedly have laceration of these structures which they insist on calling the “fourchette.” Hence, when I state that in speaking of the perineum, I mean to include in the designation these parts also, it is evident that we are not so

very far apart after all. None of us often have lacerations involving the deeper structures.

One who has never picked up the four angles of even a slight laceration, and thoroughly spread out the wound, will be greatly surprised, when he does so, at the extent of the raw surface. We say of a given case that, while there was laceration, there was not enough to do any harm. In this very case, let us just make a careful examination, in the manner suggested, and I am sure we will change our mind. A wound which involves only a quarter of an inch of the integumental surface, and no disproportionate amount of the vaginal, will be found to measure, when extended, perhaps an inch in a diagonal direction. Again you are to remember that, while there may be little evidence of laceration on the integumental surface, there may be very extensive injury within the vaginal canal. A number of you saw such a case with me at the hospital only a few days ago.

A division of lacerated *périne*a into complete, and incomplete, rupture, will answer our present purpose. In the first, the wound extends through the sphincter ani, and lays open the rectum to a varying extent. In the latter, there is rupture of various depths, from the fourchette to the sphincter ani.

When immediate repair of the perineum first came into vogue, it was customary to take deep sutures, the needle entering and emerging on the integumental surfaces, gathering up the tissues with the wire or the silk toward the external base of the triangle. This answered the purpose fairly well, but many failures are charged to the operation, and many imperfect *périne*a were the result. With the long curved needle usually provided for this operation, it is very difficult to perform an operation which proves, on careful scrutiny, to be wholly satisfactory. It nearly always results in partial, but not in complete, union. Only a few weeks ago I examined a torn perineum which had been operated on in that manner by one who well understood the principles involved, and passing my finger into the vagina it was readily thrust some depth into the wound

between the stitches, the most anterior one not at all protecting the wound from collecting, with the greatest facility, the vaginal discharges. Such pockets are what work mischief in these cases. With the lochia running down into such a wound, is it any wonder that good results are not obtained? This method of operating I do now hesitate to pronounce wrong in theory, and inadequate for the accomplishment of the purposes had in view.

Hitherto it has been my custom to apply stitches in those instances only where solution of continuity was considerable, and the loss of firmness to the pelvic floor seemed decidedly inimical to the maintenance of organs in their proper relations. This I now believe to be slovenly practice. We ought not to forget that there are other considerations of a highly important nature besides those just mentioned. I am fully persuaded that the time is coming, and, indeed, is not distant, when it will be regarded as the accoucheur's duty to make a careful examination of the vulva and vagina immediately after labor, and repair with precision *any* rent which he may discover. Moreover, I believe you will do well to follow this practice from the very beginning. It will be somewhat embarrassing, and may be met with some criticism at first, but will become tolerated and at last sought. People are ultimately well pleased with the doctor who evinces care and consideration in the management of his patients. Some of your colleagues and competitors will cry "nonsense," but you will soon silence them by delicately pointing out in individual cases the unfavorable results of the old expectant plan of management. The cry of "meddlesome midwifery" raised by some is getting to be stale. I do not believe that perfect license should be given every practitioner to do as he please; but I think the lines drawn by some are altogether too hard and fast. I am not running breathlessly after the surgical idea, yet *the conviction has taken fast hold of me that all of our obstetrical cases should be treated in accordance with approved surgical principles.* The science and art of obstetrics have advanced side by side with surgery, and right

there they hold their position. The cry of "meddlesome midwifery" was first raised by that man, who, in his day, was the prince of obstetricians, Blundell; but had it been heeded by all, the practice of obstetrics would have remained where it then was, and ill-health and death after childbirth, though even now altogether too frequent, would have been as common as it then was.

Labor, they say, is a physiological process; and so it is. The effort constantly made by nature to prevent disease germs getting a dangerous foot-hold in our bodies, is a physiological one, and yet, when the struggle waxes warm and we begin to feel it, the movement is called pathological, and artificial aid is invoked. Who can draw a clear line between physiological and pathological processes? In other words, who can say when the physiological bounds are passed? Labor is truly a physiological process, in general, and the puerperal state is likewise physiological; but certain pathological conditions are liable to be associated with them. My own conviction is that we are justified in aiding nature in her efforts, during the time when unusual efforts are required, as far as we safely can. After labor, if wounds large or small are found, standing as open doors for the entrance of infection, and as the possible points of future irritation, I say close them under antiseptic precautions. Sew up the wounds which have been made in the performance of the physiological process of parturition, and you will do much to ward off the evil effects which stand ready to assail defenceless women at this critical period.

The conditions surrounding such cases are not altogether favorable for a practice of this kind, and it may take some force of character to follow it. Nevertheless, unfavorable environment is a poor excuse for neglect of duty. It very likely is a case of first labor, and the woman, for a number of agonizing hours, has been receiving that astounding revelation of suffering common to unsuspecting primiparæ. At times she almost sank under the power of it; but bravely rallied and struggled to the close. She hopes to rest in the calm succeeding the storm, but you

decree otherwise. The genital tract must be examined and all rents repaired. The friends say, "Yes, to be sure. Poor child." But the patient, weary and worn, says "No," no. I can endure no more." The friends say "Yes," but to one another they may add the damaging comment, "There ought to have been no injuries." All this, though unpleasant, ought not to deter. Do your duty. Finish up the case in a workman-like manner and you shall ultimately have your reward.

I believe the details of this operation to be as important as those of any minor operation, and if the work is to be done at all, it ought to be well done. Surely, if there is a call for antiseptic precautions, it is right here. Look at the conditions: The woman has been in labor for several hours; the discharges have bathed the vulva, lying there exposed to the air, and doubtless undergoing some change, while the fingers of the attendant have been passing in and out of the vagina from time to time during the whole period. It may be that fœces, as well as urine, have found their way to the parts, and thus in one way and another the conditions favorable to infection have been strengthened. The fact is, if we expect to do a good piece of work it is just as essential to make elaborate preparation for the immediate as for the secondary operation. That is not customary I am free to admit; but in this particular I would have you practice an innovation. I want you to go out from the college as thorough, painstaking, skillful obstetricians. We want you to be all that you seem, and then we shall be proud to own you as our alumni.

In order that you may give these wounds proper attention, I recommend as a part of the regular obstetric outfit, the following articles: Four pairs of tenaculum forceps; one short, but broad, perineum retractor; two lateral retractors; several full-curved suture needles, an inch and a quarter to an inch and a half in length; a good needle-holder; plenty of cat-gut of various sizes, in juniper oil; a large fountain syringe having a nozzle provided with a stop-cock, by means of which the stream of water can be regulated;

and a good rubber protection for the bed. These are in addition to the usual equipment. The sheet should be so arranged that it will carry the water and blood into a receptacle placed in front of the bed. Since the bed is very yielding it will be necessary in most instances, to place a broad board of suitable length upon the springs, beneath the mattress, and also plenty of padding under the hips beneath the rubber. I carry in my bag a rubber sheet with an inflatable edge like a bed-pan, which when not inflated, may be rolled up so as to take but little room. Put the woman in position on this after she has been anæsthetized, and in the absence of assistants, fasten up the legs by passing a sheet through the popliteal spaces and then around the neck, tying it sufficiently tight to keep the extremities out of the way. If she has been under an anæsthetic, we need but prolong its influence. If but small wounds have to be sewed, an anæsthetic may not be required. Then turn on carbolated water from the syringe and thoroughly wash the parts, including the vagina. Use soap externally and dry with a clean towel.

With the instruments at hand in a bowl of carbolated water, you will be prepared to operate. Sew up first any lacerations which you find in the vagina, then those of the vestibule, and finally those of the perineum. Before beginning, be provided with two or three needles threaded with strong catgut (No. 2 being a favorite size), the threads being long, and deposit them with the instruments in the antiseptic solution, or place them in a separate dish if you prefer. They are soon softened by the water, and become as easily handled as silk. You will find it convenient to tie in the thread, since otherwise, during the operation, it may slip from the needle and occasion some annoyance. Seize the angles of any wound which you find, so as to steady it and make stitching easy, snip off fringes and irregularities which may interfere with union, and then close it with a continuous suture. Be careful to tie the thread at the finish so that it will not loosen.

In this manner you will close small wounds ; but those of considerable size, and especially those which involve muscular structure, as in the perineum, will require additional care. The four corners of an incomplete laceration of the perineum should be picked up with the forceps, and the suturing begun above, that is to say, at the vaginal end. The first one or two sutures ought to be interrupted, and firmly tied. Then entering with the long thread, you may begin the continuous suture, the two lateral and upper forceps being steadied by assistants, and the whole wound

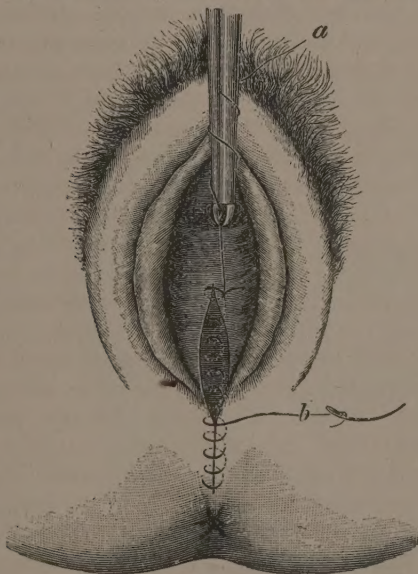


FIG. 2.

a.—Forceps holding thread where the continuous suture began. *b.*—The continuous suture returning and closing the wound over the deep stitches.

kept in perfect view. You may make complete closure with a single row of stitches, provided the wound be not large ; but if a single row will not draw the parts into perfect apposition without tension, why then, after taking a few turns through the edges, you should dip down into the depth of the wound, and gather up the tissues therein, as

you proceed toward the lower angle of the rent. After the suture emerges at the lower angle, you should take a new long thread, unless the first is of sufficient length to carry all the way back, and run a continuous suture toward the angle of the wound where the first needle entered, taking in the margins of the tear, and thoroughly closing the wound.

This procedure is well shown in the second chart. It will be observed that, in going forward on the return, the sutures touch the integumental surface for a distance, but end on the mucous surface of the vagina. If the operation be well done, and the thread not drawn too tightly, repair will almost surely ensue; the catgut sutures will be absorbed, and the occasion for dread which some women have of the taking out of the stitches be avoided.

The treatment of complete rupture of the perinæum has heretofore been followed by incomplete repair in a large percentage of cases; and it is found necessary in any instance, in order to secure a perfect result, to pay strict attention to details. The wound should be drawn open, as in the incomplete variety, with forceps at the angles. Since the lower angle is split by the rent into the rectum, two forceps will there be required. The first attention should be given the rectal wound, which must be delicately and firmly closed. In this part of the operation interrupted sutures ought to be used. The needle is first made to enter at the upper angle of the wound, at the very margin of the flap, in a direction from the rent outward, splitting the part for a short distance, and emerging on the raw surface. It is then carried over to the opposite side and made to travel from the outer side toward the edge, splitting the flap in a similar manner, and finally emerging at the very margin of the flap without penetrating the rectal mucous membrane. It is tied on the rectal side. Other sutures follow till the wound is fully closed. Coaptation of this part of the laceration having been accomplished, the rest of the wound should be treated as in the instance of incomplete rupture. It is highly essential to success here, as in

other cases, that the raw surfaces be brought together in an equable manner, so that every part will lie in contact, and thus no pockets be left.

In putting in the catgut sutures care should be exercised not to place them too close together, nor to draw them too tightly. Perfect coaptation is the only requisite. Some little experience soon teaches one the art of accomplishing this in a desirable manner.

During introduction of the sutures, tension should not be strong on the forceps; and it is advisable now and then to bring the surfaces together in order to make sure that the needle enter at opposite points, and unnecessary suture tension and distortion thus be avoided.

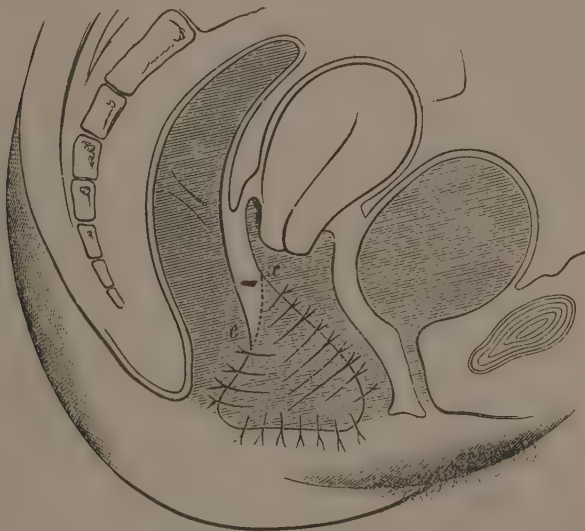


FIG. 3.

Antero-posterior section, showing at *e*. the beginning and at *x*. the end of the suturing.

Carefully wash and dry the exposed surfaces, and apply to the vulva an antiseptic pad or napkin to catch the lochia.

After-treatment consists in careful cleansing of the parts, an occasional vaginal douche given in the most gen-

tle manner, and perfect quiet. The urine should be voluntarily voided, and the parts immediately dried. Perfect quiet for a long period is essential in bad cases. In any case the patient should remain in bed longer than after normal parturition. The knees would better be padded and bound together for a few days, though this is not a necessary precaution. You will observe that I have recommended no sutures for a lacerated cervix, though I am quite well convinced that it is good practice to introduce them. I am experimenting in this direction, as some of you know from observation, but am not yet prepared to recommend the operation to the general practitioner. In conclusion, I wish to repeat with emphasis that I believe the time is coming when *all* recognized lacerations will be repaired immediately after delivery, with the same punctilious care that we manifest in attending to the ordinary details of labor. When this comes to be the rule, gynecologists will not multiply as they now do, for their occupation will be gone.

A LECTURE INTRODUCTORY TO THE THIRTY-FIRST ANNUAL
WINTER SESSION IN THE HAHNEMANN MEDICAL COL-
LEGE AND HOSPITAL OF CHICAGO.

DELIVERED SEPTEMBER 16, 1890, BY HOMER V. HALBERT, M. D.,
PROFESSOR OF DESCRIPTIVE AND PRACTICAL ANATOMY.

At the portal of your chosen profession we bid you welcome. At the threshold of your adopted life-work we extend the hand of fellowship. It is indeed an imposing sight to stand face to face with so many ambitious hopes, and I assure you the inspiration which calls you here is reciprocated by the earnest desire of your teachers that you may have a satisfactory and successful course of study.

The critical moment of life is the choice of a vocation; the anxious moment is in its preparation; the responsible moment is in its pursuit. You have passed the critical period and are now standing at the verge of your anxious future. As you begin the work before you, and as you hold to it with all your vigor you will surely gather a proportionate reward, for more truly was it never written that whatsoever you sow that most surely shall you reap.

Over the doorway of a house in ancient Athens, where a philosopher was accustomed to instruct the young men of his school, were engraved these two Greek words *Gnothi-Seavuton*—"know thyself;" and to every student who entered this door the glowing inscription above was such a living sentiment that it became the precept of his profession and the watchword of his daily life.

I know your solicitous feelings this evening; I know your ardent desires and the trembling anticipation which urge you on toward the goal of your aim; and were it within my power to say one word of encouragement, or to offer one expression of advice I would present you this ancient maxim. Make it the key-stone in the arch of your ambition. Know yourselves at the outset, and you have mastered the first important lesson. Know yourselves through all the labyrinth of your study, and your work will be pleasant and prosperous. Know yourselves in life's actual battle, and you will confer an honor to your vocation and a blessing to mankind.

In accepting this commission it is presumed that you have given the verdict careful consideration; that you are not blindly groping in the darkness hoping thereby to stumble into a profession. In every effort there must be a power behind it. The power which leads you into this work should be your perfect consecration to it. Self-aggrandizement is out of the question. One must have a love for it and some adaptation for its requirements. More than this, one must have some native ability for it and a willingness for self-sacrifice. You cannot choose a profession from the impulse of some one else's success; you cannot adopt this profession on business principles. In the broadest sense it is a calling. It calls for a sound body, a well-balanced mind and a character of personified decision. A physician should have a nature which combines strength with gentleness, keen perception with good judgment, and courage with proper caution. Emergency should never baffle. A brilliant possibility should never dazzle.

Take then these simple thoughts well into your meditation. If you are possessed by a wavering decision, or moved by false motives, it is better by far to turn from your venture before you deceive yourselves or bring dishonor upon your calling. If on the other hand you are devoted to it; if you venture in it, then cling to it with all your might. Be not overcome by any requirement. Study well and your recompense is sure to come.

The mandatory requirement in the beginning is that a student shall be well educated. The age for crude art has indeed passed. The demand of the present is truly for the scholar in the profession. The survival of the fittest was never more applicable than to the modern school of medicine. By the word education I have reference in the strictest sense to a practical one. A classical training may be desirable, though by no means is it necessary. A natural aptitude, well cultivated, may perchance develop better results; yet how much original talent is unused and unknown because its possessor has not the culture to bring it forth. How many are to-day plodding along in the professions, disgruntled, dissatisfied, and unsuccessful, simply because they lack the force of an early discipline. How much material worth is actually thrown to waste because its value is never found.

There are enough to care for the sick until you have thoroughly prepared yourselves to appreciate and understand the work you begin. One of the most pleasing features of this institution is the fact that it has always encouraged and demanded higher education in its purest sense; and the standard of each incoming class has been a living proof of its good results.

Again I believe a physician should have a thorough general education an education which takes away the rough edge and gives, at least, a conversant power with other subjects of importance. From a consensus of knowledge healthy and unbiased opinions are sure to rise. The moment you constrict thought the mind becomes narrow, doubting and uncharitable. The ever swinging pendulum of general advancement and scientific improvement keeps one constantly on the alert for new results. He who conceals his intellectual identity behind one dwarfish hobby is forever lost in his own shadow. The doctor who can never talk of anything but *materia medica* and anatomy becomes a social bore and a professional nondescript.

A generous education will, on the contrary, give you accomplishment, good manners and influence. All of these are professional essentials. The most valuable material must have a polish or its luster is never seen. Polish is not veneer, it is but the true expression of a concealed character.

The practice of medicine is a science and must not be polluted by charlatans and vampires. Its sacred record is not written in a name and its environment must not include

the imposition of a sham. I hope you *believe* this and that you enter its precincts with a perfect confidence in its scientific truth—that you are ready by your future relations and by your studious habits to preserve its integrity and elevate its standard. You cannot practice medicine by platitudes, and the one who, by subterfuge or smooth language, intends to use it as a means for a selfish end, will contaminate its holy temple and bring injury to human kind. More than this, it is a *liberal* science and lends the kindness of consideration to all facts. Through the dark ages of superstition and ignorance it has come to us relieved of many incongruities and improved by long continued experiment. Fortunate then are you who begin your study where others have been obliged to leave it. Fortunate are you to reap the fruits of so much skillful research. Remember, however, that you live in the nineteenth century and study your lesson in the light of to-day. Prove all that is good and reject all that is wrong. Profit by experiment. Learn by constant experience. Tradition is your historian but modern investigation is your preceptor.

You come here believing in a law—a law which has thus far endured the test of the severest criticism; but it is a comprehensive law and requires a just interpretation. Every theory has its variation. Every problem must be solved. Follow its tributaries and you find the ocean. Know its exceptions and you prove a law.

Professional dignity does not recognize personal controversy; to say that “we are entirely right” and “some one else is entirely wrong,” is uncalled for. The existence of a counterfeit is positive proof that somewhere there is a genuine.

The book is now open and you are ready to turn its leaves. What can I say to you of the cause you avow? What can I advise you as to the trust you assume?

I believe in systematic, persevering and practical study. Learning gained by the force of memory is neither lasting nor useful. Hap-hazard reading and irregular application are both confusing and wasteful. There must be an apprehension of that which is fitting, and an exclusion of that which is irrelevant. Only by gradations and complete preparatory work can we assume that which is complex. Step by step do we rise to any degree of accomplishment. To be well grounded in the fundamental principles—to be well trained for greater investigation confront you in these early moments of your equipment. The questions of em-

bellishment and of specialty are considerations which time and experience will amply care for.

About the best possession for you to have at present is a well constructed and properly ballasted plan of study. The college offers you a series of lectures and clinics and prescribes the amount of work you shall do from day to day. But it is for you to invent your own plan of using them. Individuality will, to a great extent, characterize and control, but a plan for each is an absolute necessity. No general ever contemplated the most insignificant campaign without a perfect plan of operation. No captain ever puts to sea without a compass to guide him. The monument of grandeur and stability represents the skill of an architect. The scholar of marked attainment is the student of systematic habit.

It is not possible for you to flounder about from one study to another, or even from one college to another, without shattering your opportunities and disrupting your mental caliber. A well chosen text is worth sticking to. A well-tried rule is worth following.

In the wake of the ambitious tendency of the present time it is quite natural for a student to undertake too much and to expect too much. In every walk of life the unusual incentive to hurry into active operation before the underlying principles are well mastered is indeed unfortunate and demoralizing. When I entered college it was told me "that the essential branches to a sound medical education did not outnumber the fingers on my two hands." *

That truth has been to me a living conviction and I cannot do better than repeat it to you. Unless it is the object to compress and condense both in teaching and in study, practical instruction will become a nonentity, and the student's mind an automatic kaleidoscope. To go outside of the regular curriculum, or to confuse the mind with that which it cannot yet understand will unfit it for the work it should do.

There is much we must for a time leave to the older heads and the experienced hands, and by holding faithfully to each day's simple demand, we shall be better prepared to cope with the intricate and the important. Build the foundation first and the superstructure will follow.

The best way to study is to make everything easy. To "pore over a book" or sleep through a lecture is no crite-

* An introductory lecture by Prof. Ludlam. *The Clinique*, vol. vi. p. 375.

tion of the amount of work accomplished. Your medical perfection is not measured by the number of lectures you attend nor by a well selected stock of copious notes unused. It is not how much you can do each hour, but how well you can perform each hour's work. To crowd stereotyped knowledge into your heads is like pouring water through a sieve. The machine of simple structure performs the best work. The mind which grasps an idea quickly and easily retains it with a better understanding; and by persistent discipline it is possible to get at the "gist of a thing" without any waste of mental strength.

It is indeed a mistaken belief that a professional standard can be estimated by a surplus of data which properly belongs to an encyclopedia. There is enough which can be digested and perfectly used without congesting the brain with that which is only intended for reference. To analyze, to classify, and to observe with a truly practical perception is the system of every well-trained intellect; and if you inaugurate this principle now it will be a wholesome impulse through all your study.

Another controlling influence in the life of a student is a determined energy. This is the vital spark of every enterprise. It fashions thought into utility; drop by drop it wears away the hardest rock, and into the darkness of ignorance it admits the warming sunlight of intelligence. Put the crude ore into the crusher and it yields the metal of value. Put your unflinching zeal into the earnest development of every resource and the inevitable result is success. By fervid attention and close application you must master each theory, learn every lesson and clinch each clinical fact.

We must look upon this as a period of development,—as a school preparatory for greater usefulness. Here you are to train every faculty for active service. Inert ability never yet revealed a product. I would not give the snap of my finger for all the brains in the world if some result did not follow mental action. It is not the brilliant operator nor the quick prescriber who endures the crucial test. It is the hand which applies the knife with trained accuracy and the one who, by long study, knows the action of a remedy.

Don't deceive yourselves with the idea that you can depend entirely upon latent ability. Don't say to yourselves, I can learn this or that by-and-by. Now is your golden opportunity; seize it and use it while you may.

It is not right to be satisfied with mediocrity, for it is truly within the power of every one to attain a higher de-

gree of efficiency. A just emulation is a proper stimulus, but to be superficial is criminal neglect. The world does not want you unless you are in truth all that you represent. Every community is full of physicians in name, but suffering humanity will ever demand the doctor in fact. Scientific qualification and honest representation! These are the attributes which tell; these are the elements which win.

It is admitted that the course of study is long and exacting, and that one lesson crowds upon another in such rapid succession as to tax your strength and try your patience; but by an unyielding perseverance you shall win the desired prize.

If the wasted moments of our lives were condensed into beneficial thought and noble actions, we should be decidedly more serviceable and infinitely more happy. If in each day's ordeal we should absorb more of the good of the world and impart more of our individual greatness, the imprint of our existence would leave a lasting memorial. Crystallize then into your every effort the true spirit of manhood and womanhood—a spirit which does not overlook the trivial things of life; but accepts and performs the most arduous duty with a willing heart.

"For after all the victor is the man who's come to stay—
Who won't give up when circumstances fail to come his way;
Who keeps on rustling just as if there'd not a thing gone wrong—
Why, Fortune can't hold out against such striving very long;
The world admires such a man and brags about his pluck,
Because he gains the victory without the aid of luck."

And there is something more than intellectual excellence which surrounds the doctor's sphere; something which tells of human worth and the true existence of a soul. Not alone are you to deal with the workmanship of the physical being; you are to treat the wounded heart as well. Into the very lives of the unfortunate you are to be trusted with your skill. Into the center of the home you are to be asked with your advice. Where suffering calls you must obey; where sorrow lingers you must remain; where poverty dwells you should not keep away. Abdicate not your better self for the sake of worldly gain; nor lose your sympathy which feels for another's pain. Imbued with a true heart and endowed with God's own love you may know and teach that Life is not an allegory and Death is not a dream.

Clinical Society Transactions. "

HOWARD N. LYON, M. D., SECRETARY.

SEPTEMBER MEETING, 1890.

The regular monthly meeting of the Clinical Society was held at the Grand Pacific Hotel Saturday evening, September 29, fifty-two members and students being in attendance. In the absence of the President Dr. W. M. W. Davison took the chair. After the usual routine business of the society was disposed of, a report was offered by

THE BUREAU OF DISEASES OF THE NOSE AND THROAT.

DR. W. A. DUNN, CHAIRMAN.

LARYNGEAL STENOSIS AND ITS SURGICAL TREATMENT.—By DR. W. A. DUNN.—Laryngeal stenosis includes any form of disease in which there occurs a narrowing of the laryngeal opening to such a degree as to cause difficult breathing, and comprises either organic or functional conditions. We may for convenience divide this condition into supra-glottic, glottic and sub-glottic stenosis. The causes of the supra-glottic stenosis are œdema, morbid growths, foreign bodies and either specific or simple inflammations. The causes of the glottic condition of stenosis are inflammatory manifestations, morbid growths, paralysis, spasms, membranous bands and some times foreign bodies. Sub-glottic stenosis is the result of morbid growths, sub-glottic hypertrophic laryngitis, or pressure from external enlargements. Syphilitic, cancerous and tuberculous manifestations may affect all portions of the laryngeal region and so pervert the laryngeal tissue by exudations or outgrowths that the passage of air becomes very difficult or impossible.

It is of the greatest importance to appreciate the different conditions that may induce symptoms of stenosis of the

larynx, as only by proper classification can we use due care and the most skillful treatment to restore the breath-way, or to prevent the gradual encroachment on the portal of life. Well do I recall a case of laryngeal stenosis of some form that came under my observation several years ago. The poor woman was a patient of one of the then leading surgeons of Indiana, who diagnosticated her case as œdema of the larynx, which term was the general scape-goat of all laryngeal stenosis in those unscientific days. She came under my unskillful treatment while on a visit to my city, and I could do nothing but sanction the uncertain diagnosis of my superior; prescribe the supposedly indicated remedy and pretend to be sorry for her on account of the absolute incurability of her disease, while in fact I was sorry for her because her doctors had not the skill to properly diagnosticate and skillfully treat her disease.

There are many such sad reports hidden away in the dark recesses of every physician's experience, that are sure to knock at his conscience, if he has one, and urge him on to better and more earnest work. That unfortunate woman would have been alive to-day, no doubt, could I have had the instruction, that is now given in our college every year.

The symptoms that are common to the various forms of this much dreaded condition are largely due to the local closure of the larynx, and to the debility and the anxiety resulting from the lack of oxygen. In the many inflammatory diseases of the larynx in which this symptom is to be observed, the advent is usually sudden and severe, and rapidly develops a state of constriction either from submucous inflammatory deposit, from spasms of the laryngeal muscles, or from fibrinous exudations into or upon the mucous membrane of the laryngeal surface.

Such manifestations are observed in acute submucous laryngitis, the acute laryngitis of children, diphtheria, or fibrinous laryngitis, and may require surgical treatment at an early date. Non-inflammatory spasm may sometimes be so severe as to endanger the life of the

patient and require immediate surgical relief, particularly in a few subjects who have an extremely hyper-æsthetic larynx.

A crumb of bread, a drop of syrup, or a medicament coming in contact with the sensitive laryngeal surface, either by accident or design, will sometimes induce a spasmodic stenosis that is fatal. It is said that in one of the London hospitals for throat diseases, two such fatal cases have been the result of direct applications within the larynx, and I have myself seen a case in which I could not have been induced to repeat the application.

Another class of spasmodic diseases that cause occlusion of the larynx, is to be observed in those cases of functional spasm of the intrinsic muscles of the larynx, which, as a rule are due to hysterical manifestations. Such cases do not usually require surgical treatment.

Bilateral paralysis of the abductors is one of the most dangerous conditions in which the patency of the laryngeal opening is compromised, and follows catarrh, typhoid fever, pneumonia, diphtheria, or growths in the region of the recurrents. Cerebral disease may also cause this trouble. Foreign bodies are not rare causes of obstruction in the larynx and may consist of coins, pieces of bone, artificial teeth, atomizer points or particles of food.

A subacute or chronic œdema may be the cause which in its course and symptoms can be mistaken for some of the other causative conditions.

Cut No. 2 shows a case in which this condition existed for many months and came near leading to the patient's death. Membranous bands resulting from injuries, syphilis, etc., may form across the larynx, connecting the vocal cords in a part or much of their border, while a plastic inflammation may join the arytenoidean surfaces, or bind the epiglottis to the laryngeal walls. Pressure from without the larynx may occlude the opening in any part of its extent. Enlarged glands, especially the thyroid, neighboring cancer, and plastic inflammation of the surrounding parts, as well as objects lodged in the upper portion of the

œsophagus add each their share of symptoms. Laryngeal growths are one of the most prolific causes of stenosis and may be benign or malignant. All portions of the larynx are liable to the disease, but the most frequent seat of the growth is found within the laryngeal box.

Papillomata are the most common of the simple growths and are found on the cords, or upon the epiglottis. Fibromata or fibro-cellular growths are next in order and are usually firm smooth sessile growths on the cords, or the epiglottis. Cystic growths, myxomata adenomata and angiomas are not so often to be observed, yet are sometimes found blocking up the breath-way. Malignant neoplasms are, of course, the most dreaded form of occlusion and may attack a portion or all of the laryngeal region. Sarcomata are usually found in the upper portion of the larynx and are of very rapid growth. Stenosis is an early and serious symptom unless relieved by surgical means.

Epitheliomata are frequent and may attack any portion of the larynx, or of the surrounding regions and thence extend to the larynx. Other forms of cancer are sometimes found in the larynx.

Syphilitic inflammation of the larynx attended by ulceration is a potent cause of stenosis, either by the swelling that attends it, or by the plastic cicatrization that follows it. These manifestations appear from secondary, tertiary, or hereditary syphilitic conditions, and are very rapid and troublesome in their course.

Tubercular affections are also frequent causes in a similar manner to syphilis but much more surely fatal in its results. Both are frequent causes of the next form of trouble of which I wish to speak—perichondritis. This condition may also result from septic, traumatic, or idiopathic causes. An illustrative case will explain this condition more fully.

Case 1. A lady aged 25 was taken with what was thought to be an acute laryngitis. In a few days she became so much distressed for breath that it was thought necessary to perform intubation.

The tube was allowed to remain a week and when removed was found to have brought away a small crust with pus adhering to it. The breathing was easier for a short time, until she came down with la grippe, which was followed by a typhoid condition which very much reduced her general condition. During this time her throat trouble increased until she was quite aphonic and very much asphyxiated. At this time she fell under the treatment of Dr. L. D. Rogers, by whom I was called in consultation, and to whom I am indebted for the history and notes of progress of the case.



FIG. 1.

Cut No. 1 shows the condition of the larynx as seen six weeks after the primary intubation had been performed. The right arytenoid and cord were very much swollen, and perfectly fixed. Near the border of the ventricular band was a small point from which pus was escaping. The stenosis increased and only by tracheotomy was her life saved. As soon as she was able to travel she returned to her home in the East still wearing the tube.

Lupus may attack the larynx and cause that peculiar contraction which is characteristic of this condition elsewhere. Sub-glottic laryngitis, either acute or chronic, is a severe and sometimes very dangerous form of stenosis. It is due to an inflammation of the submucous tissue and of the infra-glottic cellular tissue, and may take on the œdematous or sclerotic type causing a thickening of the mucous tissue to such an extent as to quite close the tube. A few drawings from my clinical record will illustrate these different conditions better, perhaps, and will show the many mistakes that are often made in regard to the diagnosis and treatment of the laryngeal troubles and how essential it is that every physician should learn the use of the laryngoscope until he has the skill, at least, to properly diagnosticate the many serious troubles that occur in this region.

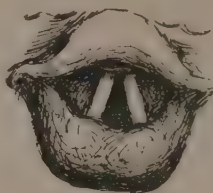


FIG 2.

Case 2. Shows a case of œdema of both aryepiglottidian folds and the inter-arytenoid space. It was accompanied by paralysis of the constrictors and aphagia. The patient when I saw him was very much emaciated, being unable to swallow either fluid or solid food, and breathed with great difficulty. I do not know the cause of the dropsy, but he was relieved in a few days both from the œdema and aphagia.



FIG 3.

Case 3. Shows an hereditary specific inflammation of the epiglottis in a boy 11 years old, of three weeks' duration. The symptoms were hoarseness, extreme difficulty in breathing and pain in the larynx. Two ulcers were seen burrowing into the top and the under surface of the epiglottis.

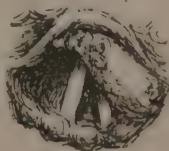


FIG 4.

Case 4, was a case of fibroid of the larynx, covering the left vocal cord and involving most of the aryepiglottic fold and the under surface of the epiglottis. She suffered for a year without knowing she had more than a "long-lasting

hoarseness," which nothing would relieve. Aphonia and difficult breathing were the only symptoms.

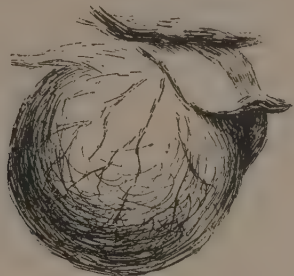


FIG 5.

Case 5. Shows a remarkable case of cystic tumor of the larynx, and also how easy it is to be mistaken when we depend on circumstances and subjective symptoms alone. The man who carries this tumor had diphtheria a year ago and as he became hoarse soon after, was of the opinion that he was suffering from post-diphtheritic paralysis of the vocal cords. An examination revealed such a tumor as is shown in the drawing, which is of the natural size. The stenosis was extreme, especially during sleep. In the treatment of stenosis of the larynx it is often necessary to employ surgical means, either to remove the cause of the stenosis, or to bridge over a climax of danger and thereby save a life that seems quite beyond help.

It is not my desire to speak of the medical treatment necessary to aid in the relief of this serious symptom and I can but give a synopsis of the proper surgical treatment.

For the acute inflammations, as fibrinous laryngitis, diphtheria, etc., intubation is to be performed, and as a last resort tracheotomy. Spasm of the larynx, from whatever cause, can be overcome by Schrøtter's dilators, and if necessary by intubation. Paralysis requires intubation and perhaps tracheotomy. Foreign bodies should be extracted by the aid of the laryngoscope and the laryngeal forceps.

Œdema requires scarification, but one must differentiate between an exudation of lymph into the cellular tissue and

an exudation from inflammation, as may be seen in cases 2 and 3.

Tracheotomy may be necessary. Membranous bands may be incised and dilated with Schrötter's dilators or intubation tubes. Pressure from without must require an external operation or extraction of a foreign body from the œsophagus. Papillomata and fibromata require the laryngeal snare, forceps, or the electro-cautery point. Intubation should not be performed but tracheotomy may be necessary. Cysts may be aspirated and injected, but a free incision and cauterization of the sac is usually necessary. Malignant growths of any form may be destroyed, if small, by the electro-cautery, but if large, thyrotomy, or laryngotomy are the only shadows on which to hope. Tracheotomy may be performed for temporary relief. Syphilitic, tuberculous and lupus inflammations are enemies of the breathway and often do call for tracheotomy and sometimes for intubation. Cauterization is sometimes performed for the ulcers, but I have never resorted to it.

For perichondritis, tracheotomy, but seldom intubation. Sub-glottic laryngitis may be overcome by long intubation tubes, or by Schrötter's dilators. In performing tracheotomy for laryngeal troubles, it is essential to introduce the tube at the lowest point, that it may be as far as possible from the diseased locality.

DISCUSSION - DR. H. P. SKILES.—The severe cases that the doctor has described seem to me to be rare and not liable to be met with by the physician in general practice. With us this stenosis is usually due to diphtheritic, or membranous croup, and is relieved by intubation. I would like to ask the essayist if he ever considers it safe to perform tracheotomy? It seems to me not to be advisable. I have had two cases of intubation, the first being in a boy of eight years, who assisted us greatly by telling when the tube became filled up. The other, a little fellow of five years, would bear it until he choked and the first evidence of the stoppage would be the symptoms of suffo-

cation. He got along nicely until the end of the first week, when we came near losing him from occlusion of the tube. I had left directions as to what should be done in such an emergency and the father, an intelligent mechanic, promptly stood the child on its head and attempted to shake the tube out. Failing in this, still keeping the child's head down, he slipped his thumb and finger, half-closed, along the windpipe, pressing toward the larynx and dislodged the tube. It was a pretty close call, for the child was nearly asphyxiated.

DR. L. D. ROGERS: Dr. Skiles considers such cases rare in general practice. In the last fourteen months I have had two of them; one was a little girl with inherited syphilis, ulcers in the throat and on the body. The laryngeal stenosis grew worse as the ulcers healed. Tracheotomy was necessary and the child seemed almost dead when the operation was performed. But, the opening being made, she rallied and her recovery was perfect except for complete aphonia.

DR. W. A. SMITH: I feel well repaid for coming to the meeting this evening, for the paper to me, at least, has been a very instructive one. I feel that I have lost one or two of these cases that might have been saved by proper operative interference.

DR. W. M. W. DAVISON: I should like to ask the essayist how he manages to feed the little ones who have been intubated while the tube is in situ. My experience is confined to one case. Dr. J. Fletcher Ingalls says, in his review of Dr. Waxham's book on Intubation, that the feeding may be accomplished by means of a soft rubber catheter passed through the nose and into the stomach. This was the method I adopted in my case; but, finding that the milk regurgitated, I cut off the end of the catheter and after that had no further trouble.

DR. R. LUDLAM asked why the older children who were wearing the tube in the larynx could not be nourished by the gavage-tube, the same as with adults who either cannot or will not swallow the necessary food?

DR. H. P. SKILES : My experience has been that you cannot put anything into the mouth of the child at such times. The little one is frightened and will close the teeth and perhaps bite off the atomizer point or whatever may be introduced into the mouth.

DR. W. A. DUNN : These cases are not uncommon among general practitioners and remind me of the story of the two Irishmen recently landed in this country. Walking out one day they discovered a toad. "Phwat is it, Pat?" asked one. "Indade, and I don't know whether it is a rhattlecum schnake or a woild torkey." This is just the condition of the general practitioner, he cannot always recognize these cases when he has them. I selected this subject on account of its practical importance. I seldom have a case of this character that is not sent to me by some physician who is engaged in general practice.

Of the cases that I have described only one is rare, the cystic tumor, and that only on account of its large size. Every physician should learn to recognize these cases and to decide which of them should be referred to a specialist. One should never jump at conclusions—because there is a laryngeal trouble following diphtheria, it is no sign that it is a post-diphtheritic paralysis.

In regard to tracheotomy a careful differentiation should be made between diphtheria and fibrous laryngitis. One is a purulent septic condition, the other not; although both are accompanied by stenosis from occlusion of the larynx by the formation of false membranes. It is owing to this lack of differentiation that so many favorable results of tracheotomy have been reported. If the diphtheritic cases were separated, the mortality in these cases would be much greater than it is generally considered to be. I would only perform tracheotomy in a case of diphtheria as a last resort, as the danger is greatly increased by making an open wound for the entrance of septic matter. If you are sure of stenosis without accompanying sepsis, first try intubation, and if that fails then perform tracheotomy.

DR. H. P. SKILES: I never knew of a case of diphtheria to recover after tracheotomy had been performed. I do not see how it could happen. The moment we make the incision we open a way for septic infection.

DR. W. A. DUNN: While this is generally true it is not necessarily so in all cases.

DR. W. A. SMITH: If the doctor means that he would operate before sepsis occurs, then he would infer that the throat troubles came on before the septic condition develops.

DR. W. A. DUNN: The septic symptoms are light before the throat symptoms are serious and an operation at this time is attended with less danger than later.

It was suggested by some one who stood by and witnessed an attempt at feeding by a tube, to put the child's head down during the feeding. In this way there is no danger of food being drawn into the air passages. I do not consider it feasible to introduce a tube every time the child is hungry.

DR. LUDLAM inquired of Dr. Dunn if in these troubles of the larynx the mucous membrane of the adjacent parts is not always in a state of hyperæsthesia?

DR. W. A. DUNN: The throat is not unusually hyperæsthetic in these conditions. Even in the case of this large cyst the only symptom is the loss of voice.

DR. LUDLAM explained his question by saying that it was sometimes difficult to decide whether or not the laryngeal symptoms were hysterical and nothing more. It had been claimed that anæsthesia of the epiglottis, with a loss of its reflex sensibility, was absolutely diagnostic of hysteria, and when this symptom was accompanied by ovarian congestion, the rule was a pretty good one. But if surgical stenosis of the larynx with aphonia, instead of being characterized by hyperæsthesia, is also marked by a local anæsthesia, we must learn to discriminate still more closely and not depend upon this single symptom as diagnostic of either condition.

DR. DUNN: In regard to the œdema of phthisis we must differentiate it from mere inflammatory enlargement. Scarification will promptly relieve an œdematous condition, while to cut into an inflammatory nodule would be to open a path for an ulcer. If you get an ulcer, treat as best you can by topical agents.

If a mouth-gag is used with young children you will have no trouble from their biting off the tubes.

DR. H. N. LYON: I should like to ask what has become of the artificial epiglottis that was tried with some success? It was intended to prevent the entrance of food into the tube during feeding.

DR. DUNN: It was a failure.

A CASE OF LARYNGEAL STENOSIS WITH PROTRACTED DELIRIUM.
—BY L. D. ROGERS, M. D.—*Case.* On the 22d day of January, 1890, I was called to see Mrs. B., aged 24, a native of Vermont. As I entered her room she appeared to look at me and to whisper, as if she desired to tell me something. I went to her bedside and placed my ear near her mouth but could not understand a word, though she whispered loud enough to be heard several feet away. She would begin a word, but there was not strength of mind sufficient to complete it. She was delirious: a mild delirium with a silly expression suggesting intoxication. She picked and pulled at the bed clothes with an unsteady hand and appeared to be hunting as if she had lost something. She would reach out for an imaginary something and keep on reaching until her hand touched the foot-board when, perhaps, she would fall back exhausted. The imperfect muscular co-ordination of her hands would remind one of an intoxicated person or an infant learning to use its hands. The whispering was constant except when interrupted by a croupy cough, such as is commonly present in a severe case of croup. The paroxysm of coughing returned about once a minute, and the noise attending it resembled that made by the sawing of a dry pine board. She expectorated a large quantity of thick, stringy, yellow, purulent mucus, occasionally streaked with blood and so foul as to be almost unbearable. The cheeks were flushed, the lips high colored, and the tongue coated with a dark brown but moist coating. The pupils were contracted but

no brain lesion was discoverable. At the hour of my first visit, 5 P. M., the pulse was 110, respiration 26 and temperature 100°.

I gathered the following incomplete and possibly incorrect history of the case. The previous September, during a visit to the White Mountains, she contracted a slight hoarseness which never entirely left her. On the 11th of December, 1889, she arrived in Chicago from Boston having contracted a severe cold during the journey, owing to the imperfect heating of the sleeping car. On the second or third day after her arrival in Chicago her throat was so sore, swollen and obstructed that she could scarcely breathe. A prominent old school throat specialist was called. He intubated the larynx, poulticed the neck and prescribed a great quantity of strong drugs. Among these was chloral which was said to have been given to quiet her neuralgia and produce sleep. The chloral had been given freely from the first up to the day the old school specialist was discharged and I was called. The intubation tube was said to have been allowed to remain in the throat two or three weeks and when removed, a place on the tube which was supposed to have been in contact with the right vocal cord was corroded. Supposing that the delirium was due somewhat to the opiates, I prescribed belladonna. I also gave as the indicated remedy for the croupy symptoms, spongia. At 3 o'clock the next morning I was called to see her. They supposed her to be dying, but she had only strangled with theropy mucus. In many respects she had really improved during the interval of my first and second visit. I substituted kali bich. in place of the spongia. During the next three days there was some improvement in the use of the hands, a few words of her whispering could be understood. No lesion of any of the thoracic or abdominal organs had been discovered except a questionable distension and tenderness in the right iliac region. A chemical and microscopical examination of the urine had shown nothing but a specific gravity of 1030 and an excessive amount of earthy phosphates. But the strange delirium continued and on the 25th of January, Dr. C. E. Lanning and Dr. J. R. Boynton saw the case with me. It was their opinion that the delirium was due to insufficient oxygenation as a result of laryngeal stenosis. Bromine, inhalation of oxygen, and a hot pack of the entire body were prescribed with apparent benefit.

On the 28th of January, Dr. W. A. Dunn made a laryngoscopic examination of the throat. He found the right aryepiglottic fold, the vocal cord and the false vocal cord very much swollen and immovable, while the arytenoid cartilage was fixed in the median line. Near the posterior extremity of the cord was seen a couple of granulations, from one of which pus was exuding. He pronounced the laryngeal trouble to be perichondritis of the right arytenoid.

During the next two weeks the most of her whispering could be understood, but her delirium was rather more violent. She suffered from a number of delusions. For example: She imagined her husband to be some one else; that one of the nurses was her aunt; that she was at her home in Vermont, and perhaps the next moment she would attempt to climb out of bed, saying she wanted to go home. And when restrained, her muscular co-ordination was sufficient to give the nurses some blows not soon to be forgotten. She would tell me in a confidential manner that they put arsenic in her tea. One minute there would be a silly smile upon her face and the next she would be shedding tears. The pulse during these two weeks varied from 110 to 120, respiration from 22 to 32, and temperature from $99\frac{1}{2}^{\circ}$ to 102° ; usually reaching the minimum temperature at noon and midnight, and the maximum at 6 A. M. and 6 P. M. There were during this time a few loose stools resembling the characteristic "green pea soup" stool of typhoid. A number of remedies were given; no apparent benefit from any except Terebinth 3x. The administration of this remedy was followed by clearer urine with a lower specific gravity and a decrease in the quantity of expectoration. About this time tracheotomy was advised. But the husband would not consent to the operation without more counsel. A prominent old school physician was called. His diagnosis was typhoid. His prescription of quinine, calomel, digitalis, and tonic feeding was followed by an aggravation of all her symptoms.

So that at 2 P. M., on the sixteenth day of February, her pulse had reached 150 per minute, and respiration 50. The face and finger nails were cyanotic, though the hands were warm. Complete asphyxiation was imminent and dissolution within twelve hours was our prognosis, unless tracheotomy was performed. Permission to operate was now obtained, some two weeks after it had been advised. She was immediately anesthetized by a mixture of ether and chloroform—two parts of the former to one of the

latter. The first incision was followed by a flow of blood which in color resembled blackberry juice. The insertion of the tracheotomy tube was followed by the expulsion of a great amount of mucus. The decrease of the cyanosis within the first few minutes after the operation was astonishing. Within an hour after, the pulse and respiration were better than they had been at any previous time during my attendance. She steadily improved and on the twelfth day after the operation the delirium, which to our positive knowledge, had been constantly present for thirty-seven days, and probably much longer, abruptly left her. She remembered nothing after her arrival in Chicago. Her surprise and indignation on finding her beauty marred by a silver tube projecting from her neck, can be imagined more easily than described. By the first of May she had nearly regained her former strength. She still wore the tube and was able to whisper quite loudly when she placed her finger over the aperture of the tube. She went east about this time and passed from under our observation.

DISCUSSION.—DR. LUDLAM asked whether Dr. Rogers had any information of the progress of this very interesting case since the patient had left the city?

DR. ROGERS said that he had heard nothing of her since she left town.

DR. W. A. DUNN: This was a very interesting case both to the Doctor and to myself on account of the acute inflammation of the larynx at the start and perhaps an idiopathic perichondritis. It is always a puzzle to account for the origin of these cases. When I saw her, the delirium resembled that of a very low state, as that of typhoid. It is a question whether or not it was due to the typhoid. The rapid subsidence of the delirium after the operation shows it to have been due to the laryngeal stenosis.

DR. H. P. SKILES: How long can the tube remain safely in a case of tracheotomy?

DR. L. D. ROGERS: This one was introduced on the 16th of February and the patient still wore it when she went away in May. In another case we performed tracheotomy in December and did not remove the tube until April.

DR. W. A. DUNN: The inner tube often has to be removed every few minutes to free it from the accumulated mucus. I don't know that they ever wear them across the river (Styx) but they wear them up to it at times.

In a throat clinic in Vienna I saw a man who had had his larynx removed five years previous. Only the epiglottis remaining. A tracheal tube, having an arm extending upward into the space previously occupied by the larynx, had been introduced. When I saw him the external orifice had been closed and he breathed entirely through the portion in the throat. Through some happy accident a couple of bands of cicatritial tissue had formed across the upper end of the tube and he was able to speak without difficulty although in a gruff voice.

VOLUNTEER PAPERS.—I. LIPOMA OF THE NECK. BY DR. G. F. SHEARS.—Dr. Boetcher, House Surgeon, presented a large fatty tumor, removed by Prof. Shears at his clinic a few days before, with two photographs showing the appearance of the patient before the operation. The case was that of a woman 35 years of age. Eight years ago she suffered with severe pains on the back of the neck which extended down the spine and up to the occiput and were of a lancinating character. Shortly afterward she noticed a small tumor over the fifth vertebra. This tumor grew steadily. It was not sensitive to the touch, but was the seat of sharp pains especially preceding a storm. Six years ago the growth was aspirated, but nothing was obtained. It has since been injected with iodine and treatment by the introduction of electric needles instituted without any affect except to increase the rapidity of its growth.

The tumor now extends from the occiput to the second dorsal vertebra, measuring six and a half inches in length by six inches in breadth, making a very decided hump on the back of the neck.

In commenting on the growth, Prof. Shears spoke as follows:

Of all the solid tumors this is the most simple in texture, bearing such a close resemblance to normal fat tissue that it is only distinguishable from it by the abnormal amount it contains and its circumscribed character. Some-

times, indeed, the fat of the tumor may differ from the fat of the part in which it is found ; but in these instances it does not differ essentially from fat in other parts of the body. Occasionally these morbid accumulations or hypertrophies have no distinct boundaries, it being almost impossible to tell where the natural adipose tissue ends or the morbid growth begins. Such accumulations are called fatty outgrowths to distinguish them from the circumscribed tissue or fatty tumor. This tumor was evidently at first mistaken for some other form of growth, or it would not have been aspirated.

The diagnostic symptoms are plain and ordinarily no mistake should be made. The points upon which we depend for diagnosis, are—1st, The general good health of the patient; 2nd, The slow progress of the disease; 3rd, Lack of pain and tenderness in the tumor; 4th, Its mobility; 5th, Its location in the subcutaneous fat and on the back; 6th, Its peculiar soft doughy feel. In one respect only does the history of this tumor differ from that of fatty tumors generally : viz., in the history of pain. But this was present before the growth of the tumor was noticed and probably had no relation to the presence of the tumor. In regard to the treatment of such a growth there is, in my judgment, only one method by which it can be successfully treated, and that is by excision. So far as I know there is no authentic record of the removal of an adipose tumor by means of internal medication.

2. THE CHLORIDE OF SODIUM AS AN ABORTIVE TO SICK HEADACHE.—BY W. A. CRANDALL, M. D., OF STURGIS, MICH. —I wish the profession to have the benefit of what I know about the effects of common salt in the *first* stages of what is known as sick headache. Having been asked time and again if I could give something that would cure sick headache, and having been troubled myself for the last year, and having tried almost everything under the sun for relief, have finally hit upon the right remedy. I cannot say that it will stop the headache after it has thoroughly set in, but in the first or premonitory symptoms, such as a full, dull feel-

ing of the head, with flickering before the eyes, and that terrible woe-be-gone feeling or the forerunner of what is behind. At this stage give a teaspoon two-thirds full of the salt dissolved in a little water, and have the patient lie down for one hour, when a change and great relief will come to the anxious one. Give it a trial, doctor, and report if such is not the case.

3. CLINICAL OBSERVATIONS BASED ON OVER FOUR HUNDRED ABDOMINAL SECTIONS. By DR. R. LUDLAM.*—*The choice of an anæsthetic.* (Continued.) The effect of sulphuric ether to stimulate the heart and to antidote the depressing influence of the chloroform should always be borne in mind. It is because we might need in almost any case to substitute the one for the other that I prefer not to give them in a mixed form. Let us have one thing at a time and then we know what we are doing, and where the patient is all the while.

Lawson Tait is quite right when he claims that the older patients bear chloroform better than ether, and also when he adds: "I am quite convinced that ether is a far more dangerous anæsthetic than chloroform on account of the bronchial irritations and of the retching and struggling to which it gives rise." It is the greater likelihood of retching and vomiting, which so strain the wound and hurt the patient after an abdominal section, that makes the ether the least desirable of the two. Of late my patients seldom suffer in this respect to any such degree as they formerly did.

4. *The incidental vomiting.*—Experience has taught me that very much can be done to avert the chloroform vomiting which is so distressing and sometimes so mischievous in peritoneal surgery. If the diet of the patient is carefully regulated and hard, indigestible food is not allowed for some days before the operation; if the bowels have been thoroughly emptied by a saline purgative, and the rectum cleansed by enemata; and if the patient is not allowed to take more than a cup of tea, or of bouillon, on the morning of the operation, much will have been done by way of prevention. But the rule must be hard and fast and it must be implicitly obeyed.

Another prophylactic of this form of vomiting is to have the patient placed upon the table before the anæsthetic is taken. To give it to her while in her room, and in her bed,

* Continued from page 406.

and then to carry her to the operating table will almost certainly induce emesis ; and, although our private patients sometimes object to this method, a sensible explanation will satisfy them and gain their consent.

In the early days I always had the patient take a big drink of whiskey, but of late years a hypodermic of brandy, whiskey or of morphine and atropia was given before the operation, the theory being that it would prevent shock, secure immunity from pain for some time afterward and lessen the tendency to vomiting. Now, however, it is a very exceptional case if I use morphia at any time, and the whiskey (old rye) is reserved for the after-treatment. I believe that given occasionally, not by the mouth, but hypodermically, during the first twelve or twenty hours, especially if the operation has been prolonged or the patient is very weak and the stomach very irritable, whiskey will often prove of the greatest benefit. Those women who have been accustomed to depend upon almost any kind of stimulant, including morphine and the bromides, ought not to be deprived of whiskey under these circumstances. It certainly lessens the risk of vomiting by acting as an antidote to the anæsthetic, thus helping the patient to be rid of it sooner than could otherwise happen.

Incidentally a hypodermic of whiskey is not only of direct benefit as already stated, but it often serves to put the patient to sleep, under the impression that she is taking an anodyne, and thus spares her the disagreeable after-effects of morphine and kindred drugs.

I am satisfied that in certain weak and impressible subjects there is less likely to be trouble with the stomach if there is no "suggestion" of nausea and of the sickening effects that usually follow the taking of an anæsthetic. And so of late my rule is to forbid the nurse, or the doctor, to say anything in the hearing of the patient that would remind her of the possibility of such a symptom. For, small and trifling as this matter may seem, "prevention is better than cure," and we must keep all the sources of mischief out of the way.

Since the barbarous old clamp has fallen into disuse, the suffering that followed an ovariectomy is very much lessened, and so also is the liability to immediate and obstinate vomiting, strangury, cystitis and the necessity for using the catheter.

Certain cases of auto-infection in which the vile fluids from old cysts have been taken into the circulation before

an operation was attempted, are accompanied by the most obstinate vomiting. I have learned to look with suspicion upon a case that comes to me with an aphthous condition of the mouth, a very irritable stomach, partial urinary suppression and occasional attacks of an exhausting diarrhoea, for these symptoms are almost certain to depend upon a pre-operative sepsis with ulceration of the gastro alimentary mucous membrane. In a patient who was brought to me by Dr. C. W. Eaton, of Des Moines, Iowa, in November, 1880, and upon whom I operated in the hospital, these symptoms were very prominent. The tumor weighed twenty-five pounds, was multilocular, the largest cyst being crowded into the epigastric region. Despite the most vigilant nursing and care, the vomiting increased and she died of confirmed sepsis on the morning of the fifth day. A careful autopsy showed that the wound had healed very kindly and completely, both internally and externally. There were no signs of peritonitis anywhere, no effusion of blood or of lymph, no clots, and not a drop of pus could be found along the incision or about the pedicle or the clamp. In all respects the process of union and of repair had proceeded without any arrest or complication. But the stomach was greatly dilated and contained three pints of a dirty ochre-colored water.

On being opened along its greater curvature, nearly one-half of its mucous surface was found to be highly congested and in a state of violent inflammation. Near its middle portion and along the larger curvature were three distinct ulcers, the largest of which was nearly as big as a dime. These were in the midst of the inflamed area, and were evidently acute and active in character, being partially covered with pus. On either side of these recent ulcers was a row of dark colored spots which the physicians present recognized as so many cicatrices of ulcers that must have healed. They had the appearance of shot holes, and there were more than twenty of them. I have had two other cases with the same symptoms before death, and similar lesions at *post-mortem*.

In a communication which I had the honor to make to this Society in June, 1886,* this complication was thoroughly discussed, and its clinical significance established.

* See "A Peculiar Cause of Fatality after Ovariectomy," the CLINIQUE vol. vii, page 268, and also Helmuth's Surgery, 5th edition, 1887, page 1091,

In a few cases where the vomiting has been unusually persistent, continuing for thirty hours or more from the time of the operation, and accompanied by great restlessness and a rise of temperature, without any corresponding signs of sepsis, I have found the trouble to depend upon iodoform poisoning. This condition has been recognized by the peculiar color of the urine, and by the appearance of the black line in the test tube when strong nitric acid is added to that fluid. In a hospital case in which I made a tubovariotomy in May last upon a patient of Dr. C. A. Weirick, of Marseilles, Ill., the vomiting continued into the second night, and without any assignable cause; at 2 A. M. the temperature mounted to 102° , where it remained without variation until I saw her at 9 o'clock in the morning. The urine was found to be extremely yellow, and the nitric acid test detected the iodine without doubt. I ordered the dressings removed from the wound, the iodoform to be dusted off, and the iodoform gauze exchanged for the mercurial gauze. In two hours the vomiting had ceased and the temperature had fallen two degrees, after which the patient made an uninterrupted recovery.*

It is not rare to find those to whom the smell of iodoform is so disagreeable that it will make them ill if it is used for dressing the abdominal wound. One way of obviating this result, while we preserve the good effect of this agent for destroying the ptomaines, is to use Terrillon's mixture of iodoform and vaseline, which can be smeared over the wound and then covered directly with absorbent cotton. But, in case it is so objectionable, it is better to omit it altogether, and either to substitute something less offensive, or to depend upon absolute cleanliness and the complete protection of the wound from the admission of air.

5. *The choice of time for making an abdominal section* — Unless in some great emergency, it is best to select the time as well as the place of operating with considerable care. Most of my sections have been made at mid-day, when the light was the strongest. I have seldom opened the abdomen when the weather was stormy and the wind in the east, and when I have been forced to do so my patients have not done very well. The theologians have not told

* For further information on this subject see an excellent paper entitled "*Iodoform poisoning; a good test for Iodine in the Urine*," by E. M. Bruce, Analytical Chemist, in the CLINIQUE, vol. xi, page 296.

us whether what is said in the Bible about "filling the belly with the east wind" applies to these cases: but it seems certain that such conditions sometimes have a very depressing effect upon the patient, and militate against her recovery. Fortunately, in the latitude of Chicago it is quite exceptional to have the wind from that quarter, and, therefore, our work does not often require to be postponed for that reason.

In making an ovariectomy, or a supra-vaginal hysterectomy, the season and the outside temperature are not regarded as they were a few years ago. At first we never operated in July or August, and seldom in the extreme winter weather. But now, in serious cases in which delay is dangerous, we go forward, taking care to counteract the untoward conditions as best we may. In July last (1890) I removed an extra-uterine fibroid from a patient of Dr. G. W. Munroe, at Blair, Nebraska, the outdoor temperature being 108°. She made a good recovery. Of ten ovariectomies that I have made in Minnesota when the thermometer ranged from 6 to 36° below zero every one got well. February 2, 1878, I removed an ovarian tumor weighing 80 pounds, the cyst-wall being extremely adherent to the parietes and so vascular that it was split until we got beyond the line of union, and then cut through, all around, and the tumor taken away. The operation had been deferred two days because of a severe snow storm; but now the air was crisp and very clear, and the temperature twelve degrees below zero. She too made a good recovery. So that, while we cannot fence out the east wind, my experience confirms the idea that it is possible to protect these patients against harm from the extremes of heat and cold, if we go about it properly.

On reaching a flourishing little town in Nebraska, in April, 1888, for the purpose of making an ovariectomy, the physician who met me at the railway station expressed his fear that I would not operate, and his opinion that, after all, we would be obliged to wait a week or more because his patient had just begun to menstruate. I replied that if she were well enough in other particulars, it would make no essential difference, but, in truth, I had never before entered upon this operation under similar circumstances. We did wait over the next day, which was Sunday, because it was rainy and nasty; but on Monday the tumor was taken out, while she was still flowing. No injurious consequences followed and she recovered promptly.

Since that time, while I would prefer to make an ovariectomy a little before or soon after the menstrual period, I have not hesitated in severe cases to disregard the fact that the patient might be flowing at the time. In the case of bleeding fibromata that must be removed through an abdominal section, I very much prefer to operate just before the monthly discharge is due, for then the patient is at her best degree of strength, and whatever blood is saved will help her to react and recover. And the same remark applies to the Battey-Tait operation when it is made for the purpose of putting an end to the dangerous and uncontrollable menorrhagia that sometimes attends upon uterine fibromata.

But my experience has led me to conclude that, when a tubo-ovariotomy is undertaken for the cure of dysmenorrhœa from salpingitis, and from structural disease with or without enlargement of the ovaries, the most suitable time for operation is soon after the flow. For, if it is made immediately in advance of period, and you should think best to remove but one ovary and tube, the struggle to establish the discharge through or by the remaining appendages might easily add to the risks of the early convalescence. This would be especially true if, as usually happens in confirmed cases, the patient has been subject to a relapsing peritonitis on slight provocation. All causes and signs of sepsis apart, several of my patients, upon whom I operated just when the menses were due, have shown the ill effects of my choice of time for doing this work. Indeed, unless it is to anticipate and to avert a menstrual hemorrhage, even where both of the ovaries and tubes are taken, it is best whenever we can do so to avoid the shock and the crisis that are incident to the monthly molimen. And this can be done by choosing a point of time midway between two periods.

The highly neurotic condition that attends upon an immediate post-operative return of the monthly cycle, whether the menses come on or not, is sometimes shown by the clinical thermometer. Where the appendages have been removed from both sides, and the flow is practically impossible, we may have such a rise of temperature and such a perturbation, possibly with abdominal distention and vomiting, as will lead one to fear the advent of a septic fever or inflammation. The same is true of the recurrence of the period directly following a hysterectomy, whether that operation is partial or complete, and whether it has

been made by the abdominal or the vaginal method. In one of my cases of vaginal extirpation of the uterus already reported to this Society, the patient's temperature suddenly rose on the 5th day to 109° . It came down almost as suddenly and she recovered without an untoward symptom. In one of my hospital cases, where the right ovary and tube were removed for a frightful dysmenorrhœa with hystero-epilepsy, the return of the period on the second day sent the temperature to 105° , she became very nervous and restless, and threatened to have the usual fit, but did not make it out, and finally got well again without any recurrence of the old difficulty. Indeed, now that six months have passed, she menstruates almost without pain and has no more of those "horrid" spasms.

That peritonitis with its unwelcome train of symptoms, is more likely to occur under these circumstances than it would be if we were careful to remove the uterine appendages, or even the uterus itself, after instead of before the flow, has been made evident to my mind by a number of cases which need not be detailed in this connection. Suffice it to say that during the last eighteen months I have been more careful in this regard and with much better results.

(To be continued.)

LARYNGEAL STENOSIS.—A BOLD PLUNGE AND A BRAVE DEED.—*Apropos* of the report presented and discussed at the last meeting of the Clinical Society (page 487), and as illustrating the practical character of the teaching in the Hahnemann Hospital and College, the following facts are full of interest: September 27, Mr. B. entered the hospital for treatment of a cystic tumor within the larynx, and beneath the epiglottis. September 28 it was carefully aspirated. October 1 the sac had begun to refill, and it was therefore incised in three places. A slight hæmorrhage followed. In an hour the house surgeon, Dr. H. Boetcher, was called to find respiration arrested, the face cyanotic and consciousness lost. He immediately plunged his scalpel into the trachea and allowed the air to rush into the lungs. The aperture was kept open until a tracheotomy tube could be passed and now the patient is going about his business again.

Clinical Reviews.

A CLINICAL STUDY OF DISEASES OF THE KIDNEYS, INCLUDING SYSTEMATIC CHEMICAL EXAMINATION OF URINE FOR CLINICAL PURPOSES: SYSTEMATIC MICROSCOPICAL EXAMINATION OF URINARY SEDIMENTS; SYSTEMATIC APPLICATION OF URINARY ANALYSIS TO DIAGNOSIS, PROGNOSIS AND TREATMENT. BY CLIFFORD MITCHELL, A. M., M. D. W. T. KEENER, 1890, pp. 431.

So reads the legend upon the title page of the last work from the pen of Prof. Clifford Mitchell. The author divides his work into some fourteen chapters. The first and second are devoted to the directions for making chemical and microscopical examinations of urine, illustrated by numerous well executed plates. Some analysts, perhaps, will be inclined to quarrel a little with Prof. Mitchell in some of his analytical methods, but any one will certainly feel repaid by a careful perusal of this part of the work. Particularly pertinent is what he says in regard to collections of the sample for examination.

In the third chapter he deals with the application of the results to diagnosis, and this (granting the correctness of the author's views) will be a boon to a physician not "thoroughly up" on the subject.

The author devotes some hundred pages to the "Therapeutics of Bright's Disease" (perhaps it were better put Bright's diseases) in which he details the remedies the patient should take, where he should live, what he should eat, etc.

Other so-called kidney diseases are more or less fully detailed in a like manner.

The tables which appear in various parts of the book are very cleverly conceived.

Let it be understood that the author makes no claim that the complete diagnosis, prognosis and treatment rests entirely with the results of urinary examinations, but gives a clever exposition of the practical application of the results of such examinations as apply to the handling of these difficult cases.

The reference tables in the appendix will be very useful in making calculations.

Whatever else may be said of the work none can deny that it is an honest, earnest effort in the right direction.

E. M. B.

Miscellaneous Items.

Our old friend Dr. W. H. Burt indignantly denies that, as stated in our last issue, his suralimentation theory was "resurrected from among the simples of the hydropaths and old ladies," and we gladly give him the benefit of the correction, besides calling attention to the fact that the plans for his new hospital for consumptives, to cost \$75,000, are out and the building will soon materialize.—Dr. Hel-muth, a colt of tender age, won a race the other day in or about New York.—Dr. L. S. Ingman, formerly of Madison, Wis., and preceptor for nine good pupils that have taken honors in old Hahnemann, has located in Oak Park, Ill.—Dr. A. P. Sherwin, an alumnus, of Suffield, Ct., was married Oct. 1st to Miss L. B. Fenn, of Bristol, Ct.—Dr. J. P. Wayland has removed from Stillman Valley to Sycamore, Ill., and Dr. O. A. Williams, '90, has located in Panama, N. Y., and Dr. G. C. Eshelman at the Dalles, Oregon.—The old Hahnemann Hospital is full to overflowing.—Prof. Bailey has been spending a few days with the family and friends in celebrating the golden wedding of his greatly beloved parents.—The Rock River Institute of Homœopathy will hold its 35th session at Clinton, Iowa, Nov. 1st.—Homœopathy in France has suffered severely in the recent death of Dr. Chargé, of Marseilles.—At last accounts Dr. Hanna was in Paris.—The report at the next meeting of the Clinical Society, October 25th, will come from the bureau of Clinical Medicine, Prof. Hawkes, Chairman, who *en passant*, has resumed work in his old office in Central Music Hall.—Dr. Smith has just recovered from a slight attack of cholera in-phantom.—Prof. Crawford has returned to his duties in Chicago in greatly improved health and to the college work in the same old spirit.—A number of reviews and other papers are crowded out of this issue.—Hurrah for the new hospital!